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Chamberlain et al.

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(54) **FIBER ARCHITECTURE OPTIMIZATION
FOR CERAMIC MATRIX COMPOSITES**

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(58) **Field of Classification Search**

CPC .. B32B 5/02; B32B 5/024; B32B 5/12; B32B
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See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
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U.S. Appl. No. 61/799,241 by Chamberlain et al., entitled "Fiber
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Ceramic Matrix Composites," filed Mar. 15, 2013.

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(51) **Int. Cl.**

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(57)

ABSTRACT

Creating a ceramic matrix structure may include alternating
different layers of fiber fabric to achieve porosity, infiltra-
tion, and/or other objectives. Different layers of the ceramic
matrix structure may be configured differently to achieve
different objectives in different regions of the ceramic matrix
structure. The fiber tow spacing, fiber count and/or other
characteristics may be varied within individual layers and/or
among different layers of the ceramic matrix structure.

(52) **U.S. Cl.**

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7 Claims, 7 Drawing Sheets

